

# Phase 6 Multiples, Factors, Primes and Patterns Assessment

<b>Phase 6 Progression Overview</b>	<b>Assessment Note</b>	<b>Marks</b>
I can find all the factors of any whole number	Question 1	/1
I can use known relationships between multiplication and division to find multiples	Question 2	/1
I can determine the rule (known as generalisation) that describes the pattern from a table of results and use this rule to calculate the corresponding value for a larger number.	Question 3	/2
TOTAL MARKS		<b>/4</b>

	Question	Mark												
1	<p><b>I can find all the factors of any whole number</b></p> <p>a.) Find all the factors of 36. Show how you know you have found <i>every</i> factor. <i>Hint: Work in pairs (e.g., <math>1 \times 36</math>, <math>2 \times 18</math>...) until you reach the middle.</i></p>	1												
2	<p><b>I can use known relationships between multiplication and division to find multiples</b></p> <p>a.) A pupil says: "I think 54 is a multiple of 6 because <math>6 \times 9 = 54</math>." Which of the following statements correctly uses multiplication or division to check whether 72 is a multiple of 6?</p> <p>A. <math>72 \div 6 = 12</math>, so 72 is a multiple of 6. B. <math>6 \div 72 = 12</math>, so 72 is a multiple of 6. C. <math>72 \times 6 = 12</math>, so 72 is a multiple of 6. D. <math>72 \div 9 = 8</math>, so 72 is a multiple of 6.</p>	1												
3	<p><b>I can determine the rule (known as generalisation) that describes the pattern from a table of results and use this rule to calculate the corresponding value for a larger number.</b></p> <p>a.) A machine creates a pattern using this table:</p> <table border="1" data-bbox="205 1247 1230 1503"> <thead> <tr> <th data-bbox="205 1247 718 1288">INPUT</th> <th data-bbox="721 1247 1230 1288">OUTPUT</th> </tr> </thead> <tbody> <tr> <td data-bbox="205 1290 718 1330">1</td> <td data-bbox="721 1290 1230 1330">5</td> </tr> <tr> <td data-bbox="205 1332 718 1373">2</td> <td data-bbox="721 1332 1230 1373">8</td> </tr> <tr> <td data-bbox="205 1375 718 1415">3</td> <td data-bbox="721 1375 1230 1415">11</td> </tr> <tr> <td data-bbox="205 1417 718 1458">4</td> <td data-bbox="721 1417 1230 1458">14</td> </tr> <tr> <td data-bbox="205 1460 718 1500">5</td> <td data-bbox="721 1460 1230 1500"></td> </tr> </tbody> </table> <p>What is the rule that links the input to the output?</p> <p>Choose the correct answer:</p> <p><b>A.</b> Multiply the input by 5 <b>B.</b> Add 3 to the input <b>C.</b> Multiply the input by 3, then add 2 <b>D.</b> Multiply the input by 2, then add 3</p> <p>b.) Finish the table</p>	INPUT	OUTPUT	1	5	2	8	3	11	4	14	5		2
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1	5													
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